

**I. REJECTION OF CLAIMS UNDER 35 USC § 102**

Claims 1-4, 8-11, and 22-27 stand rejected under 35 USC 102(e) as being anticipated by US Patent No. 6,248,626 to Kumar et al.

The examiner indicates that the applicant's previous arguments are non-persuasive because the applicant has argued limitations that are not present in the claims.

The applicant respectfully disagrees with the examiner's characterization of the applicant's previous arguments. The applicant continues to assert that the Examiner has not provided a prima facie basis for the rejection.

Both independent claims 1 and 8 clearly recite a gate adjacent to the channel region and forming a junction with the channel region. Further, the gate comprises a first semiconductor and a second semiconductor with an energy gap greater than the first semiconductor and being doped with a second impurity element to increase carriers of the opposite conductivity as the first free carriers.

Kumar et al. does not teach a gate that is adjacent to the channel region and forming a junction with the channel region. The applicant admits that Kumar et al. teaches a memory cell for charge storage and that the Kumar et al. memory cell includes a gate. However, the gate of Kumar et. al. is separated from the channel region by an oxide film and therefore is not adjacent to the channel region and does not form a junction with the channel region - a limitation that, as stated above, is clearly within both of applicants independent claims 1 and 8.

Each of claims 2-14 and 21-27 depend from one of the independent claims 1 and 8 and can therefore be distinguished over Kumar et. al. and the other art of record for at least the same reasons. Further, the additional features recited in such claims further serve to distinguish such claims over Kumar et. al and the other art of record.

With specific reference to claims 2 and 9, such claims include all of the claim limitations of independent claims 1 and 8 respectively, and further include a backgate that is adjacent to the channel region and forming a junction with the channel region.

The applicants admit that the memory cell of Kumar et al. includes a back gate. However, the back gate of Kumar et. al. is not adjacent to the channel region and does

not form a junction with the channel region - a limitation that is clearly recited in both of claims 2 and 9.

In summary, neither Kumar et al. nor the other art of record, alone, or in combination, discloses the structure claimed by the applicant in the independent claims (1 and 8) of the present application. Moreover, by virtue of all other claims depending from one of claims 1 and 8, neither Kumar et al. nor the other art of record discloses the structure of such other claims.

***II. REJECTION OF CLAIMS UNDER 35 USC § 103***

Claims 5-7, and 12-14 stand rejected under 35 USC 103(a) as being unpatentable over US Patent 6,248,626 to Kumar et al. as applied above and in further view of US Patent 6,274,887 to Yamazaki et al.

The applicant respectfully traverses the rejection of claims 5-7 and 12-14 based on Kumar et al. for the reasons set forth above. Yamazaki et al. does not make up for the above-discussed deficiencies in Kumar et al. Withdrawal of the rejection is respectfully requested.

***iii. CONCLUSION***

Accordingly, claims 1-14 and 22-27 are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.


Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Serial No.: 09/902,429

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

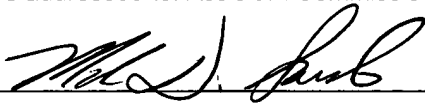
  
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DATE: November 25, 2002

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CERTIFICATE OF MAILING

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

  
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